would be rounded and disclosed to the consumer as 3 years. If the issuer based the minimum payment total cost estimate on 38 months (or any other minimum payment repayment estimate that would be rounded to 3 years), the minimum payment total cost estimate would be deemed to be accurate.

(d) *Calculating the estimated monthly payment for repayment in 36 months.*—(1) *In general.* When calculating the estimated monthly payment for repayment in 36 months, a card issuer must calculate the estimated monthly payment amount that would be required to pay off the outstanding balance shown on the statement within 36 months, assuming the consumer paid the same amount each month for 36 months.

(2) *Weighted annual percentage rate.* In calculating the estimated monthly payment for repayment in 36 months, an issuer may use a weighted annual percentage rate that is based on the annual percentage rates that apply to a cardholder's account and the portion of the balance to which the rate applies, as shown in appendix M2 to this part. If a card issuer uses a weighted annual percentage rate and any promotional terms related to annual percentage rates apply to a cardholder's account, other than deferred interest plans or similar plans, in calculating the weighted annual percentage rate, the issuer must calculate a weighted average of the promotional rate and the rate that will apply after the promotional rate expires based on the percentage of 36 months each rate will apply, as shown in appendix M2 to this part. For deferred interest plans or similar plans, if minimum payments under the deferred interest or similar plan will repay the balances or transactions in full prior to the expiration of the specified period of time, if a card issuer uses a weighted annual percentage rate, the card issuer must assume that the consumer will not be obligated to pay the accrued interest. This means, in calculating the weighted annual percentage rate, the card issuer must apply a zero percent annual percentage rate to the balance subject to the deferred interest or similar plan. If, however, minimum payments under the deferred interest plan or similar plan may not repay the balances or transactions in full prior to the expiration of the specified period of time, a card issuer in calculating the weighted annual percentage rate must assume that a consumer will not repay the balances or transactions in full prior to the expiration of the specified period of time and thus the consumer will be obligated to pay the accrued interest. This means, in calculating the weighted annual percentage rate, the card issuer must apply the annual percentage rate at which interest is accruing to the balance subject to the deferred interest or similar plan. A card issuer may use a method of calculating the estimated monthly payment for repayment in 36 months other than a weighted annual percentage rate, so long as the calculation results in the same payment amount each month and so long as the total of the payments would pay off the outstanding balance shown on the periodic statement within 36 months.

(3) *Assumptions.* In calculating the estimated monthly payment for repayment in 36 months, a card issuer must use the same terms described in paragraph (b) of this appendix, as appropriate.

(4) *Tolerance.* An estimated monthly payment for repayment in 36 months shall be considered accurate if it is not more than 10 percent above or below the estimated monthly payment for repayment in 36 months determined in accordance with the guidance in this appendix (after rounding described in §226.7(b)(12)(i)(F)(*1*)(*i*)).

(e) *Calculating the total cost estimate for repayment in 36 months.* When calculating the total cost estimate for repayment in 36 months, a card issuer must total the dollar amount of the interest and principal that the consumer would pay if he or she made the estimated monthly payment calculated under paragraph (d) of this appendix each month for 36 months. The total cost estimate for repayment in 36 months shall be considered accurate if it is based on the estimated monthly payment for repayment in 36 months that is calculated in accordance with paragraph (d) of this appendix.

(f) *Calculating the savings estimate for repayment in 36 months.* When calculating the savings estimate for repayment in 36 months, a card issuer must subtract the total cost estimate for repayment in 36 months calculated under paragraph (e) of this appendix (rounded to the nearest whole dollar as set forth in §226.7(b)(12)(i)(F)(*1*)(*iii*)) from the minimum payment total cost estimate calculated under paragraph (c) of this appendix (rounded to the nearest whole dollar as set forth in §226.7(b)(12)(i)(C)). The savings estimate for repayment in 36 months shall be considered accurate if it is based on the total cost estimate for repayment in 36 months that is calculated in accordance with paragraph (e) of this appendix and the minimum payment total cost estimate calculated under paragraph (c) of this appendix.

[75 FR 7846, Feb. 22, 2010]

APPENDIX M2 TO PART 226—SAMPLE CALCULATIONS OF REPAYMENT DISCLOSURES

The following is an example of how to calculate the minimum payment repayment estimate, the minimum payment total cost estimate, the estimated monthly payment for repayment in 36 months, the total cost estimate for repayment in 36 months, and the savings estimate for repayment in 36 months using the guidance in appendix M1 to this part where three annual percentage rates apply (where one of the rates is a promotional APR), the total outstanding balance is $1000, and the minimum payment formula is 2 percent of the outstanding balance or $20, whichever is greater. The following calculation is written in SAS code.

data one;
/*

NOTE: pmt01 = estimated monthly payment to repay balance in 36 months sumpmts36 = sum of payments for repayment in 36 months

month = number of months to repay total balance if making only minimum payments
pmt = minimum monthly payment
fc = monthly finance charge
sumpmts = sum of payments for minimum payments

*/
* inputs;

* annual percentage rates; apr1=0.0; apr2=0.17; apr3=0.21; * insert in ascending order;
* outstanding balances; cbal1=500; cbal2=250; cbal3=250;
* dollar minimum payment; dmin=20;
* percent minimum payment; pmin=0.02; * (0.02+perrate);

* promotional rate information;
* last month for promotional rate; expm=6; * = 0 if no promotional rate;
* regular rate; rrate=.17; * = 0 if no promotional rate;

array apr(3); array perrate(3);

days=365/12; * calculate days in month;

* calculate estimated monthly payment to pay off balances in 36 months, and total cost of repaying balance in 36 months;

array xperrate(3);
do I=1 to 3;
xperrate(I)=(apr(I)/365)*days; * calculate periodic rate;
end;
if expm gt 0 then xperrate1a=(expm/36)*xperrate1+(1-(expm/36))*(rrate/365)*days; else xperrate1a=xperrate1;

tbal=cbal1+cbal2+cbal3;
perrate36=
(cbal1*xperrate1a+cbal2*xperrate2+cbal3*xperrate3)/(cbal1+cbal2+cbal3);
(cbal1*xperrate1a+cbal2*xperrate2+cbal3*xperrate3)/(cbal1+cbal2+cbal3);

* months to repay; dmonths=36;

* initialize counters for sum of payments for repayment in 36 months; Sumpmts36=0;

pvaf=(1-(1+perrate36)**-dmonths)/perrate36; * calculate present value of annuity factor;
pmt01=round(tbal/pvaf,0.01); * calculate monthly payment for designated number of months;
sumpmts36 = pmt01 * 36;

* calculate time to repay and total cost of making minimum payments each month;
* initialize counter for months, and sum of payments;
month=0;
sumpmts=0;

do I=1 to 3;
perrate(I)=(apr(I)/365)*days; * calculate periodic rate;
end;
put perrate1=perrate2=perrate3=;

eins:
month=month+1; * increment month counter;
pmt=round(pmin*tbal,0.01); * calculate payment as percentage of balance;
if month ge expm and expm ne 0 then perrate1=(rrate/365)*days;

if pmt lt dmin then pmt=dmin; * set dollar minimum payment;

array xxxbal(3); array cbal(3);
do I=1 to 3;
xxxbal(I)=round(cbal(I)*(1+perrate(I)),0.01);
end;

fc=xxxbal1+xxxbal2+xxxbal3 − tbal;

if pmt gt (tbal+fc) then do;
do I=1 to 3;
if cbal(I) gt 0 then pmt=round(cbal(I)*(1+perrate(I)),0.01); * set final payment amount;
end;
end;

if pmt le xxxbal1 then do;
cbal1=xxxbal1 − pmt;
cbal2=xxxbal2;
cbal3=xxxbal3;
end;

if pmt gt xxxbal1 and xxxbal2 gt 0 and pmt le (xxxbal1+xxxbal2) then do;
cbal2=xxxbal2 − (pmt − xxxbal1);
cbal1=0;
cbal3=xxxbal3;
end;

if pmt gt xxxbal2 and xxxbal3 gt 0 then do;
cbal3=xxxbal3 − (pmt − xxxbal1 − xxxbal2);
cbal2=0;
end;

sumpmts=sumpmts+pmt; * increment sum of payments;
tbal=cbal1+cbal2+cbal3; * calculate new total balance;
* print month, balance, payment amount, and finance charge;
put month=tbal=cbal1=cbal2=cbal3=pmt=fc=;

if tbal gt 0 then go to eins; * go to next month if balance is greater than zero;

* initialize total cost savings;
savtot=0;
savtot= round(sumpmts,1)—round (sumpmts36,1);

* print number of months to repay debt if minimum payments made, final balance (zero), total cost if minimum payments

made, estimated monthly payment for repayment in 36 months, total cost for repayment in 36 months, and total savings if repaid in 36 months;

put title=' ';

put title='number of months to repay debt if minimum payment made, final balance, total cost if minimum payments made, estimated monthly payment for repayment in 36 months, total cost for repayment in 36 months, and total savings if repaid in 36 months';

put month=put month=tbal=sumpmtstbal= sumpmts=pmt01=sumpmts36=savtot=;

put title=' ';

run;

[75 FR 7846, Feb. 22, 2010]

SUPPLEMENT I TO PART 226—OFFICIAL STAFF INTERPRETATIONS

Introduction

1. *Official status.* This commentary is the vehicle by which the staff of the Division of Consumer and Community Affairs of the Federal Reserve Board issues official staff interpretations of Regulation Z. Good faith compliance with this commentary affords protection from liability under 130(f) of the Truth in Lending Act. Section 130(f) (15 U.S.C. 1640) protects creditors from civil liability for any act done or omitted in good faith in conformity with any interpretation issued by a duly authorized official or employee of the Federal Reserve System.

2. *Procedure for requesting interpretations.* Under appendix C of the regulation, anyone may request an official staff interpretation. Interpretations that are adopted will be incorporated in this commentary following publication in the FEDERAL REGISTER. No official staff interpretations are expected to be issued other than by means of this commentary.

3. *Rules of construction.* (a) Lists that appear in the commentary may be exhaustive or illustrative; the appropriate construction should be clear from the context. In most cases, illustrative lists are introduced by phrases such as "including, but not limited to," "among other things," "for example," or "such as."

(b) Throughout the commentary, reference to "this section" or "this paragraph" means the section or paragraph in the regulation that is the subject of the comment.

4. *Comment designations.* Each comment in the commentary is identified by a number and the regulatory section or paragraph which it interprets. The comments are designated with as much specificity as possible according to the particular regulatory provision addressed. For example, some of the comments to §226.18(b) are further divided by subparagraph, such as comment 18(b)(1)–1 and comment 18(b)(2)–1. In other cases, comments have more general application and are designated, for example, as comment 18–1 or comment 18(b)–1. This introduction may be cited as comments I–1 through I–4. Comments to the appendices may be cited, for example, as comment app. A–1.

SUBPART A—GENERAL

Section 226.1—Authority, Purpose, Coverage, Organization, Enforcement and Liability

1(c) Coverage.

1. *Foreign applicability.* Regulation Z applies to all persons (including branches of foreign banks and sellers located in the United States) that extend consumer credit to residents (including resident aliens) of any state as defined in §226.2. If an account is located in the United States and credit is extended to a U.S. resident, the transaction is subject to the regulation. This will be the case whether or not a particular advance or purchase on the account takes place in the United States and whether or not the extender of credit is chartered or based in the United States or a foreign country. For example, if a U.S. resident has a credit card account located in the consumer's state issued by a bank (whether U.S. or foreign-based), the account is covered by the regulation, including extensions of credit under the account that occur outside the United States. In contrast, if a U.S. resident residing or visiting abroad, or a foreign national abroad, opens a credit card account issued by a foreign branch of a U.S. bank, the account is not covered by the regulation.

1(d) Organization.

Paragraph 1(d)(1).

1. [Reserved]

Paragraph 1(d)(2).

1. [Reserved]

Paragraph 1(d)(3).

1. *Effective date.* The Board's amendments to Regulation Z published on May 19, 2009 apply to covered loans (including refinance loans and assumptions considered new transactions under §226.20) for which the creditor receives an application on or after July 30, 2009.

Paragraph 1(d)(4).

1. [Reserved]

Paragraph 1(d)(5).

1. *Effective dates.*

i. The Board's revisions published on July 30, 2008 (the "final rules") apply to covered loans (including refinance loans and assumptions considered new transactions under §226.20) for which the creditor receives an application on or after October 1, 2009, except for the final rules on advertising, escrows, and loan servicing. But see comment 1(d)(3)–1. The final rules on escrow in §226.35(b)(3) are effective for covered loans (including refinancings and assumptions in §226.20) for which the creditor receives an application on